RED LEAF SPOT OF AMARYLLIS

J. J. McRitchie

Amaryllis, Hippeastrum sp. hybrids, are widely grown throughout the United States. With their large lily-like flowers, they are prized as house plants in the North and in outdoor gardens in the subtropical South. The flowers range in color from orange, yellow, green, and red to pure white. All species of Hippeastrum are native to tropical and subtropical America, from Mexico and the West Indies south to Chile and Argentina (7).

The most common fungus disease of amaryllis is caused by Stagonospora curtisii (Berk.) Sacc. The disease is variously known as red leaf spot, red blotch, and red fire (2). The same fungus also attacks Narcissus spp. causing the disease known as leaf scorch (1). The fungus also affects a large number of other amaryllids (6).

SYMPTOMS. Both leaves and flower stalks are attacked by the fungus. Initial symptoms are small red spots which enlarge, elongate and become sunken (fig. 1). In later stages, the gray mycelium of the fungus develops in the center of the lesions while the border remains red. Severely attacked leaves and flower stalks are characteristically deformed or bent at the infected area. Since any injury to amaryllis tissue usually produces a red pigment, all red spots are not necessarily associated with the disease (3).

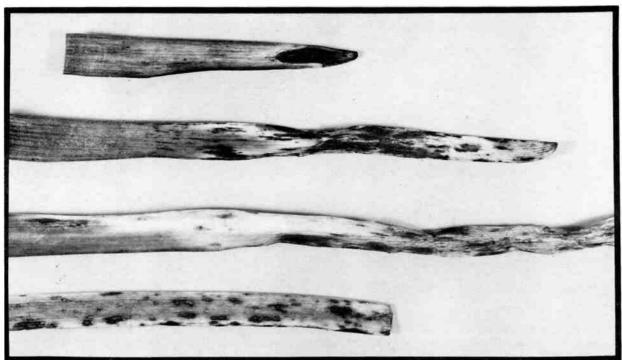


Fig. 1. Red leaf spot of amaryllis showing characteristic elongate sunken lesions.

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CONTROL. Since the fungus may infect the bulbs, heavily infected bulbs should be discarded. Infected scales from bulbs that are lightly infected should be removed, and the bulbs immersed in water at 40 C (104 F) for 30 minutes (5). Amaryllis grown outdoors in the South have been protected from red leaf spot by spraying with ferbam or zineb at 10-day to 2-week intervals, starting at the small leaf stage and ending at bloom (4).

Literature Cited

- 1. Creager, D. B. 1933. Leaf scorch of narcissus. Phytopathology 23: 770-786.
- 2. Creager, D. B. 1959. Red leaf spot of amaryllis. Fla. State Plant Board, Plant Pathol. and Nematol. Lab Note 22. 4 p.
- 3. Forsberg, J. L. 1963. Diseases of ormanental plants. Univ. 111. Spec. Publ. 3. 208 p.
- 4. Gill, D. L. 1954. Reducing amaryllis leaf spot by spraying. Plant Dis. Reptr. 43:1272-1273.
- 5. Mullin, R. A., and T. A. Kucharek, eds. 1971. Florida plant disease control guide. Inst. Food & Agr. Sci., Univ. Fla., Gainesville, p. 11-10.
- 6. Smith, C. 0. 1935. Inoculations of Stagonospora curtisii on the Amaryllidaceae in California. Phytopathology 25:262-267.
- 7. Traub, H. P. 1958. The amaryllis manual. The Macmillan Co., New York. 338 p.